

State/Local Idle Reduction Regulations

State	Applicability	Idling Time Limit
TX (Houston / Galveston)	Diesel/gasoline motor vehicles (> 14,000 lbs GVW)	5 min* April 1 – Oct 31 30 min* for heat/AC transit/school buses
UT (Salt Lake City)	Diesel vehicles	15 minutes*
VA	Buses when unattended, parked, or stopped	10 minutes*

Source: CARB and EPA

*with some exemptions

DOE Idle Reduction Demonstration

- **Goal: To gather objective in-use information on the performance of available technologies by characterizing:**
 - **Specifications and Costs: system descriptions, capital and installation costs, payback periods**
 - **Vehicle Operations: fuel consumption (truck idling and IR systems), engine oil consumption and changes, maintenance (truck and IR systems)**
 - **Other Evaluation Information: engine and component wear, resale value, user impressions**

DOE Idle Reduction Demonstration

- **Reduce 800+ million gallons of annual fuel use during idling periods**
- **Reduce average of 2,000 hours of idling**
- **Fleet/component demonstration/data collection project partners:**
 - **Caterpillar, International Truck, Cox Trucking**
 - **Schneider National, Freightliner, Webasto Thermosystems**
 - **Espar, Wal-Mart Transportation, Truck manufacturer TBD**

DOE Idle Reduction Demonstration – Caterpillar Team

- Team: Caterpillar, International Truck, and Cox Transfer
- Five new idle reduction trucks, five control trucks
- Trucks idle about 1840 hours/year
- MorElectric™ Technology
- Electrically driven accessories
- Three main components
 - HVAC unit, generator, and APU
 - IR uses 0.2 gallons fuel/hour versus 0.9 gallons fuel/hour for C13 engine
- Duration - FY03 4 Quarter – FY05 4 Quarter



DOE Idle Reduction Demonstration – Schneider National Team

- **Team: Schneider National, Freightliner, Webasto Thermosystems**
- **100 trucks with heating and 20 trucks with cooling systems**
- **Trucks idle approximately 480 hours/year**



DOE Idle Reduction Demonstration – Schneider National Team (cont'd)

- **Webasto Air Top 2000 cab heater**
 - Self contained diesel fueled air heater
 - Offered as standard installation option from Freightliner
- **Webasto Cab Cooler**
 - New product that utilizes phase change cooling storage technology
 - Medium is charged during normal tractor operation using existing air conditioning system
- **Duration - FY03 4 Quarter – FY05 2 Quarter**

DOE Idle Reduction Demonstration – Espar Team

- Team: Espar, Wal-Mart Transportation, truck manufacturer TBD
- 20 trucks with combined heating / cooling systems
- At least two control trucks
- Espar Airtronic Bunk Heater
 - Diesel fueled coolant heater for engine pre heat
- D.C. Airco
 - Rooftop mounted electric air conditioning unit
 - Operates on starting or auxiliary batteries
- Duration - Award expected FY04



**All vehicle testing reports and fact sheets available
via:**

<http://avt.inel.gov>